

Service Manual

Black and White Television

TR-579EX

Chassis No. T203V-A Main Manual



Specifications

Power source:	AC: 120V, 220V, 50/60Hz	Speaker:	3-3/8 inches round type voice coil 80hm
Power Consumption:	AC: 69W	Audio Output:	Max. 1.5W
Antennas:	UHF/VHF Dipole Antenna 75 Ohm, Unbalanced type. UHF & VHF external Antenna 300 Ohm, Balanced type.	Picture Tube:	500XB4 55cm P-Tube 110° Deflection Aluminized Heater Voltage 6.3V Heater Current 300mA
Receiving Channels:	U.S.A. Channel: VHF Ch2—Ch13 U.S.A. Channel: UHF Ch14—Ch83 C.C.I.R. Channel: VHF Ch3—Ch11 C.C.I.R. Channel: UHF Ch21—Ch69 U.S.A. (Europe): VHF Ch3—Ch11 U.S.A. (Europe): UHF Ch14—Ch83	Transistor:	29
Intermediate:	Video 45.75MHz	Diodes:	22
Frequency:	Sound 41.25MHz (U.S.A. Channel and U.S.A. Europe Channel) Sound 40.25MHz (C.C.I.R. Channel)	Thermistor:	3
Intermediate		H.V. Rectifier	1 (TVM570)
Frequency Band Width:	Over 3MHz	Automatic	Keyed AGC (Automatic Gain Control)
		Control Circuits:	AVR (Automatic Voltage Regulator) Saw-Tooth AFC (Automatic Frequency Control)
		Dimensions:	Height: 40.5cm (1 5—15/16 inches) Width: 56.0cm (22-1/16 inches) Depth: 35.0cm (13-13/16 inches)
		Weight:	17.7kg (39-1/16 lbs.)



National

Matsushita Electric Trading Co., Ltd.

P.O. Box 288, Central Osaka Japan
ORDER NO. TED-7511-037F

CAUTION

The high voltage supply at the picture tube anode will give an unpleasant shock, but does not supply enough current to give a fatal burn or shock. However, secondary human reaction to otherwise harmless shocks have been known to cause injury. Always discharge the picture tube anode to the receiver chassis before handling the tube. Certain portions of the high voltage generating circuit are dangerous and extreme caution should be observed. The picture tube is highly evacuated and, if broken, glass fragments will be violently expelled. WHEN HANDLING THE PICTURE TUBE, ALWAYS WEAR GOGGLES AND PROTECTIVE CLOTHING.

LOCATION OF CONTROLS

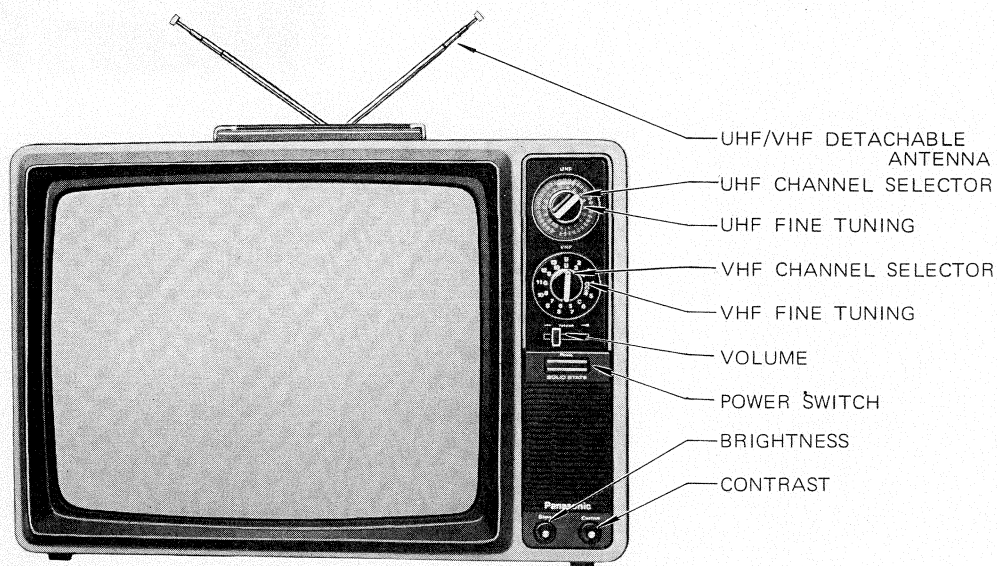


Fig. 1.

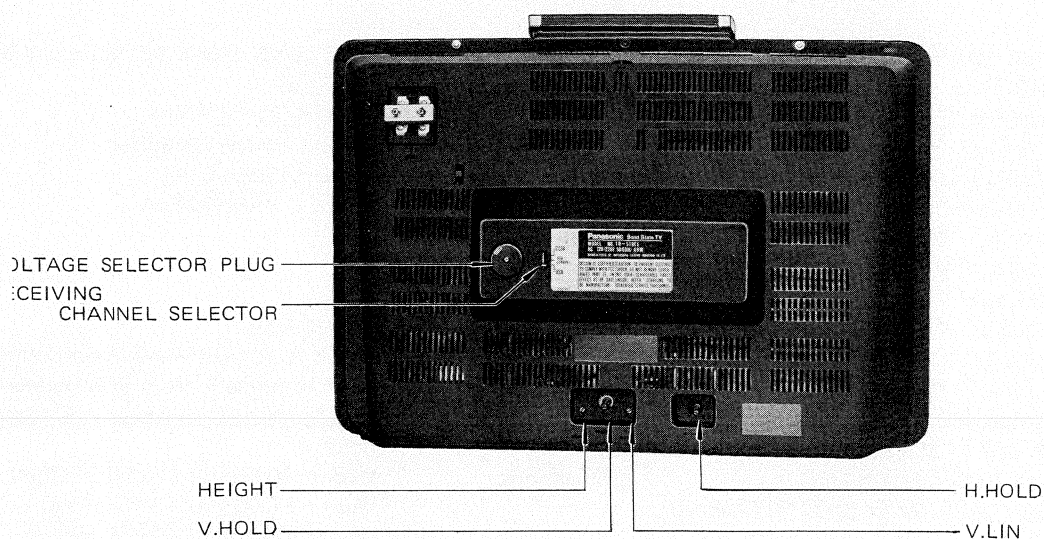


Fig. 2.

ADJUSTMENTS

VOLTAGE SELECTOR PLUG (Fig. 2)

Before using the TV set, observe the position of the voltage selector is set at the correct voltage supplied in your area.

VERTICAL HEIGHT AND VERTICAL LINEARITY (Fig. 2)

These controls should be adjusted simultaneously to give proper vertical size consistent with good vertical linearity.

Adjustment should be made to extend the picture limits approximately 5mm beyond the top and bottom edges of the mask.

FOCUS

Adjust for the sharpest and clearest picture.

AGC (Fig. 3)

The adjustment of the AGC control effectively changes the operating point of the AGC amplifier. Turn the AGC control fully clockwise to set for maximum gain. In some areas this may cause clipping of the sync pulses, resulting in a "wobble" in the picture and unstable sync. Turning the AGC control to a counterclockwise direction will decrease the gain of the receiver.

TO ADJUST THE AGC PROPERLY

- (1) Set the channel selector to a channel transmitting a strong signal.
- (2) Set the R-F AGC control VR12 to the center position (see Fig. 3).
- (3) Turn the I-F AGC control VR11 fully counterclockwise, and the contrast and brightness controls fully clockwise.
- (4) Adjust the I-F AGC control VR11 to obtain the sharp and clear picture. If I-F AGC control VR11 is turned fully clockwise, the picture may get dark and turned fully counterclockwise, it may get bright.
- (5) Observing the picture, turn the R-F AGC control VR12 clockwise or counterclockwise to the point where the snow noise disappears in the picture. (Fig. 3)
- (6) Check the reception on all channels. These should be no wiggling. Make certain the picture does not disappear when the contrast control is turned to minimum.
- (7) Re-adjust AGC control slightly if necessary. In very strong signal areas where slight sync. clipping is still evident, shorten antenna length to reduce sensitivity of the set.

YOKE POSITION (Fig. 5)

The yoke is secured to the neck of the picture tube with an angular clamp and screw. To adjust the yoke and correct for picture tilt, loosen this clamp, correct tilt and re-tight the screw.

CENTERING (Fig. 5)

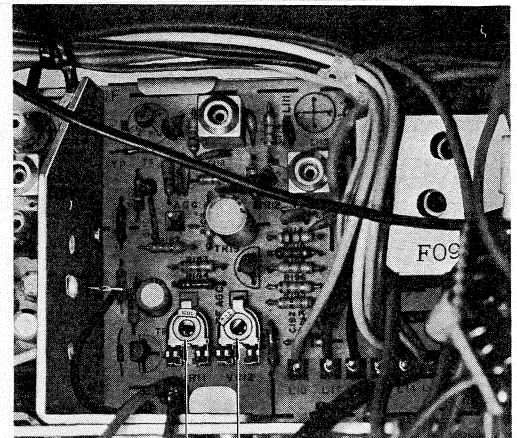
The picture centering device consists of two rings located at the rear of the yoke assembly. Each ring has a tab for ease of adjustment. The tabs should be rotated and moved towards or away from each other until the picture is properly centered on the screen of the picture tube.

AVR (AUTOMATIC VOLTAGE REGULATOR) (Fig. 4)

Connect a circuit tester across B + supply line and chassis. Next make certain B + supply voltage is B + 110V by adjusting the AVR control.

HORIZONTAL WIDTH

Adjust the slug of the coil to extend the picture about 13mm beyond the mask with the brightness control set to normal operating position.



I-F AGC(VR11) — R-F AGC(VR12)

Fig. 3.

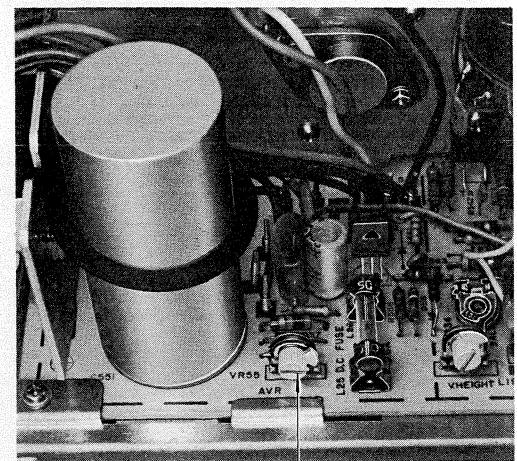


Fig. 4.

AVR (VR55)

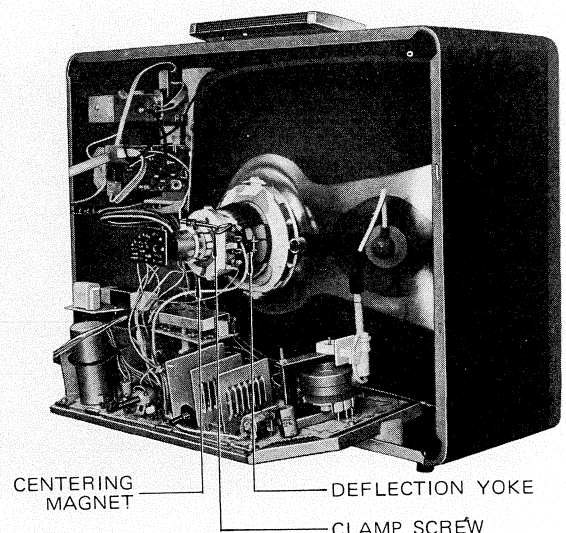


Fig. 5.

DISASSEMBLY INSTRUCTIONS

REAR COVER REMOVAL

- (1) Remove 3 screws (A) from the rear cover shown in Fig. 6.

MAIN CIRCUIT BOARD REMOVAL

- (1) Remove the rear cover.
- (2) Pull the circuit board towards you and lift it up.

TUNER BLOCK REMOVAL

- (1) Remove the rear cover.
- (2) Pull off the channel knobs from tuner shaft (See Fig. 1).
- (3) Remove 2 screws (B) shown in Fig. 7.

SPEAKER REMOVAL

- (1) Remove the rear cover.
- (2) Remove 4 screws (C) shown in Fig. 7.

PICTURE TUBE REMOVAL

- (1) Remove the rear cover and the Main circuit board.
- (2) Remove 4 mounting screws (D) shown in Fig. 8.

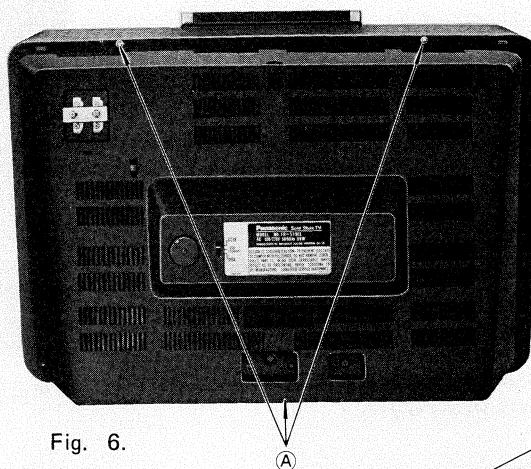


Fig. 6.

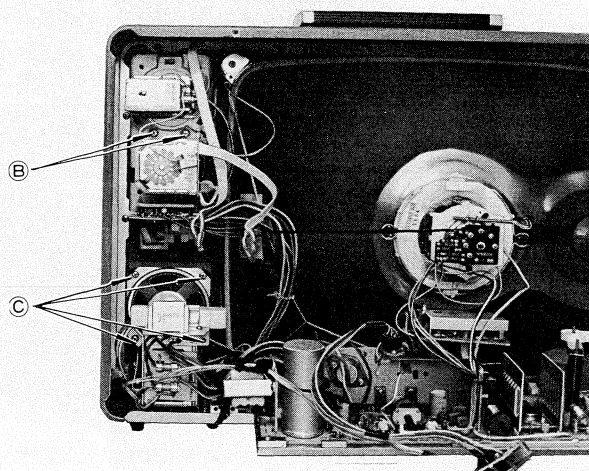


Fig. 7.

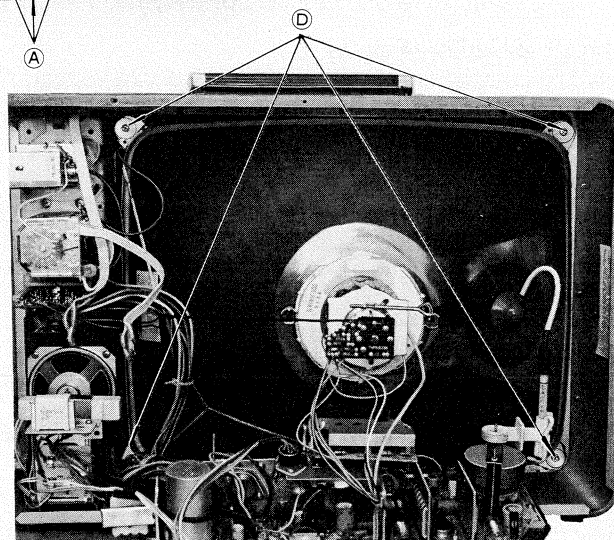


Fig. 8.

VIDEO I-F ALIGNMENT

Equipment Required

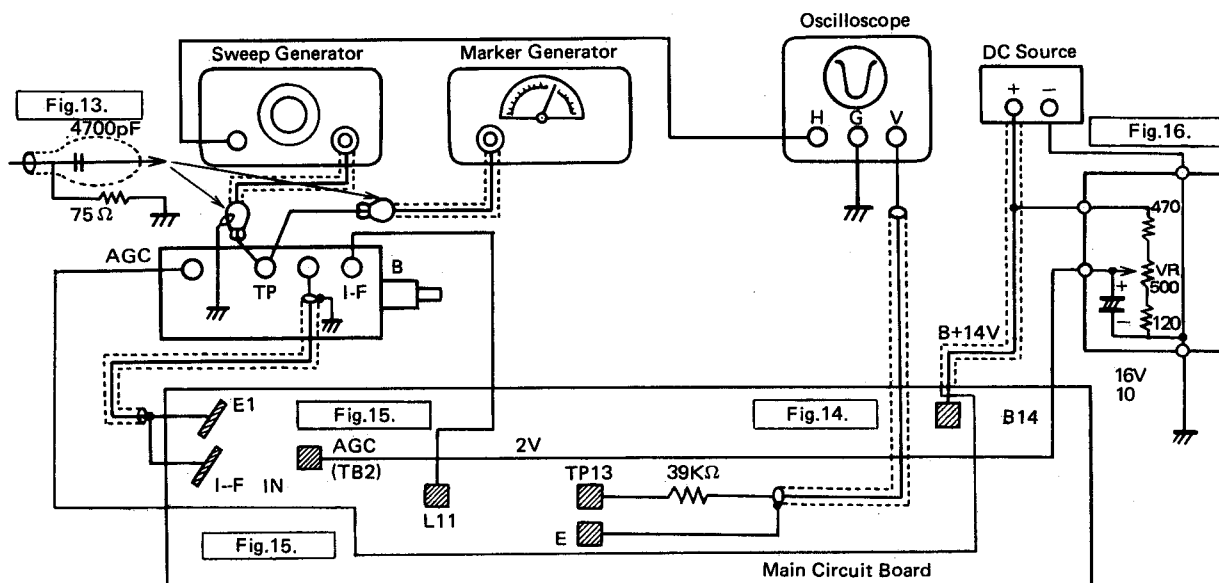
Sweep Generator With a range of 33 to 41MHz.
 Marker Generator With a range of 33 to 41MHz.
 Oscilloscope
 Bias Box With an output voltage of DC 0 to 30V.

Preparation

VHF Channel Selector Highest unused channel in the area.

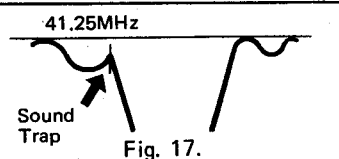
Equipment Connection

1. Connect a sweep generator to the tuner test point as shown in Fig. 13
2. Loosely couple a marker generator to the output lead of the sweep generator.
3. Connect oscilloscope to the video amplifier input terminal TP13 as shown in Fig. 14.
4. Apply 2V to the I-F AGC terminal TP12 as shown in Fig. 15.
5. Apply 14V to the DC bias terminal B14 as shown in Fig. 16.

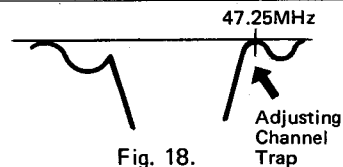


Adjustments

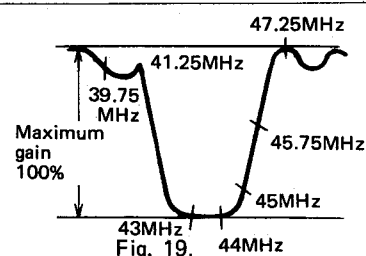
STEP 1 Adjust L101 for minimum gain at 41.25MHz as shown in Fig. 17.



STEP 2 Adjust L102 for minimum gain at 47.25MHz as shown in Fig. 18.



STEP 3 Adjust both L103 and Tuner convertor coil to obtain the correct overall response curve as shown in Fig. 19.



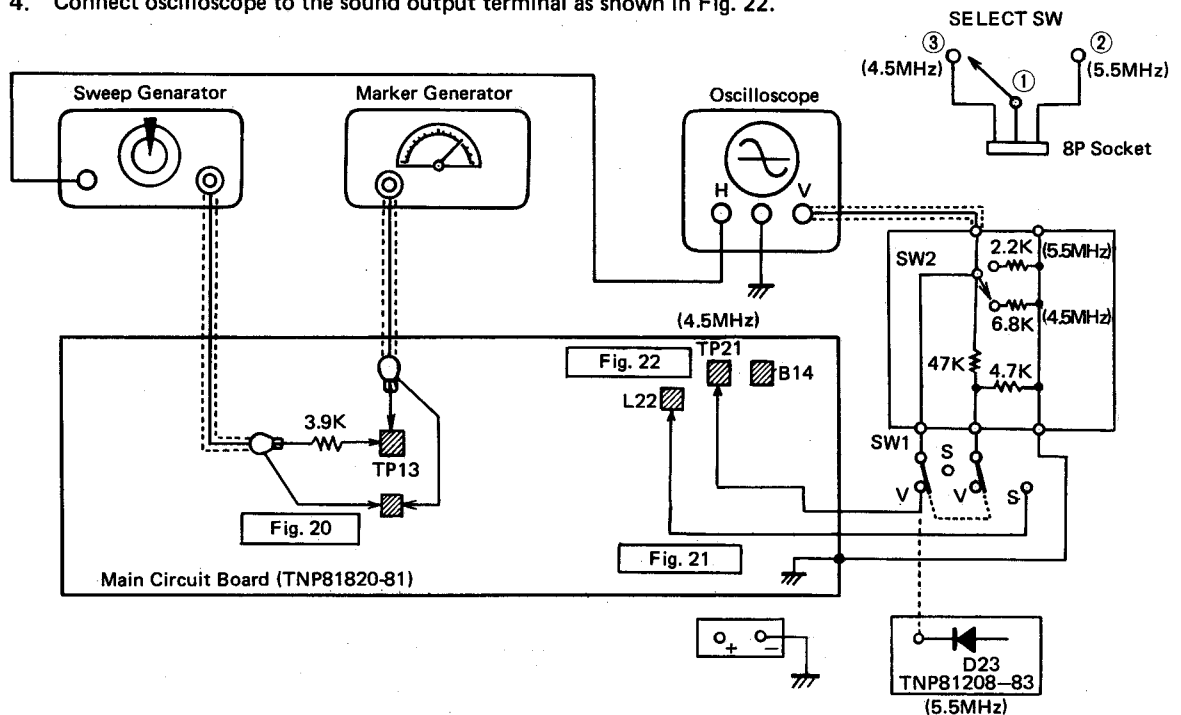
SOUND I-F ALIGNMENT

Equipment required

Sweep Generator	With a range of 4.4 to 5.6MHz.
Marker Generator	With a range of 4.4 to 5.6MHz.
Oscilloscope	
Bias Box	With an output voltage of DC 0 to 15V.

Equipment Connection

1. Connect a sweep generator to the video amplifier input terminal TP13 as shown in Fig. 20.
2. Loosely couple a marker generator to the output lead of the sweep generator.
3. Apply 14V to the DC bias terminal B14 as shown in Fig. 21.
4. Connect oscilloscope to the sound output terminal as shown in Fig. 22.



4.5MHz ADJUSTMENT		5.5MHz ADJUSTMENT	
STEP 1	Turn the core of the L203 until the 4.5MHz marker is at the center of the "S" curve as shown in Fig. 23.	STEP 1	Turn the core of the L253 until 5.5MHz marker is at the center of the "S" curve as shown in Fig. 25.
STEP 2	Adjust L201 and L202 obtain the symmetrical linearity of the "S" shaped curve as shown in Fig. 24.	STEP 2	Adjust L251 and L252 obtain the symmetrical linearity of the shaped curve as shown in Fig. 24.
<p>Fig. 23</p> <p>Fig. 24</p>		<p>Fig. 25</p> <p>Fig. 26</p>	

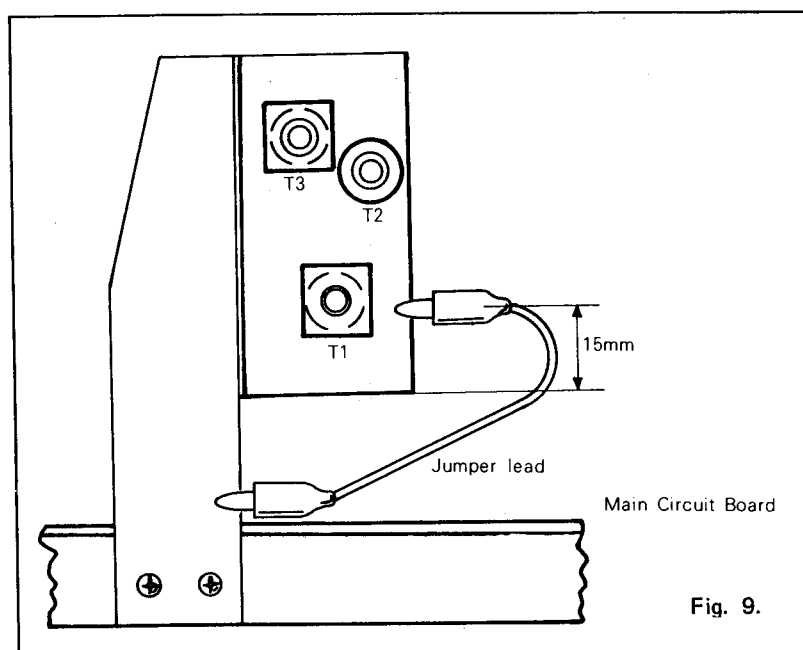
A/E CONVERTER ALIGNMENT

A/E CONVERTER ALIGNMENT

EQUIPMENT.....4.5 MHz SWEEP GENERATOR
 MARKER GENERATOR
 OSCILLOSCOPE

PREPARATION

1. Connect the marker generator, the sweep generator and oscilloscope as you do for sound I-F alignment.
2. Connect the jumper lead as shown in Fig. 9.
3. Turn the power switch ON.



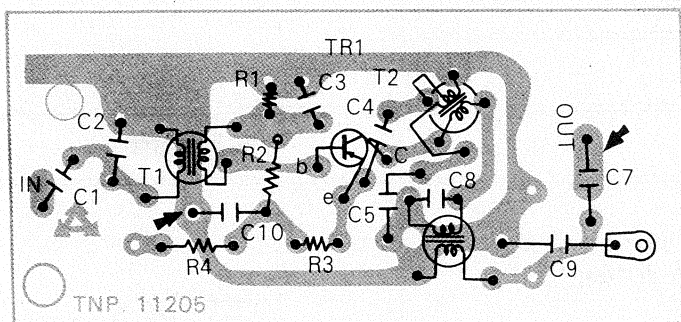
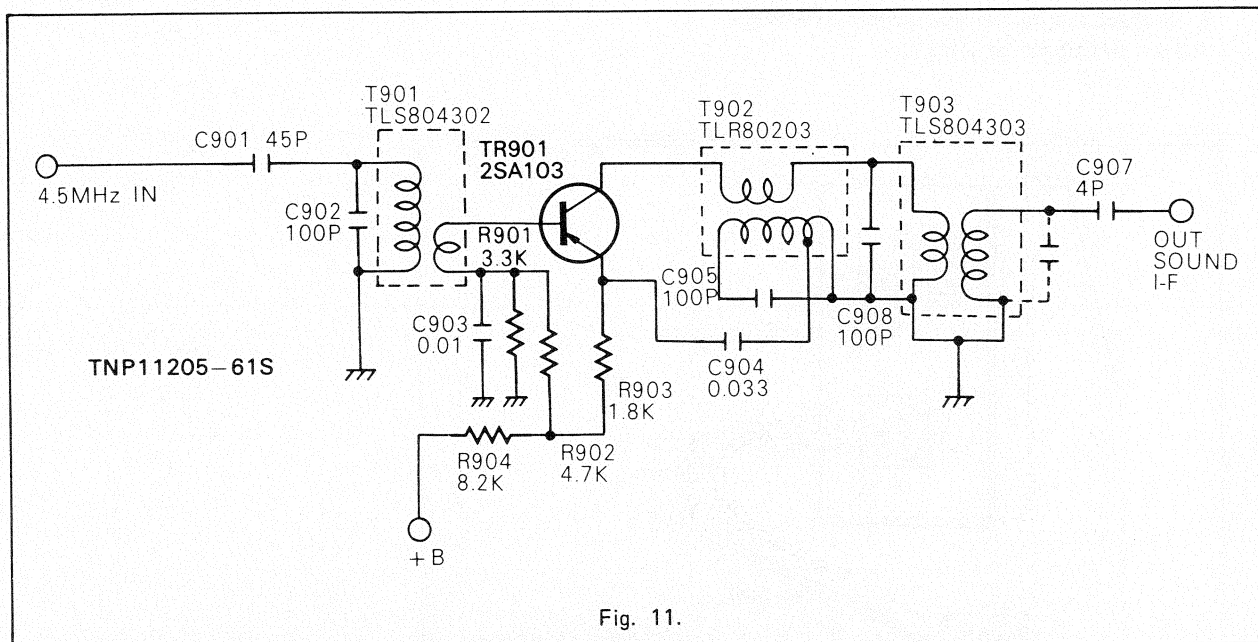
ALIGNMENT PROCEDURE

STEP	WAVEFORM
<ol style="list-style-type: none"> 1. Before adjusting the A/E converter, adjust 5.5 MHz sound I-F. 2. Adjust T1 and T2 for the maximum gain at +75 KHz and -75 KHz marker position. 3. Turn the core of T2 until the 4.5 MHz marker is at the center of the "S" curve as shown in Fig. 10. 	<p>The diagram shows an S-curve waveform on a horizontal axis. The top of the curve is labeled '+75KHz', the center crossing the axis is labeled '4.5MHz', and the bottom of the curve is labeled '-75KHz'. The caption 'Fig. 10.' is at the bottom right of the diagram area.</p>

NEW CIRCUIT EXPLANATION A/E CONVERTER

A/E CONVERTER CIRCUIT EXPLANATION

A/E converter is a frequency changer of Sound I-F from 4.5 MHz (American Sound I-F) to 5.5 MHz (European Sound I-F). Connects the A/E converter to European standard system TV set, and you can watch American broadcasting.

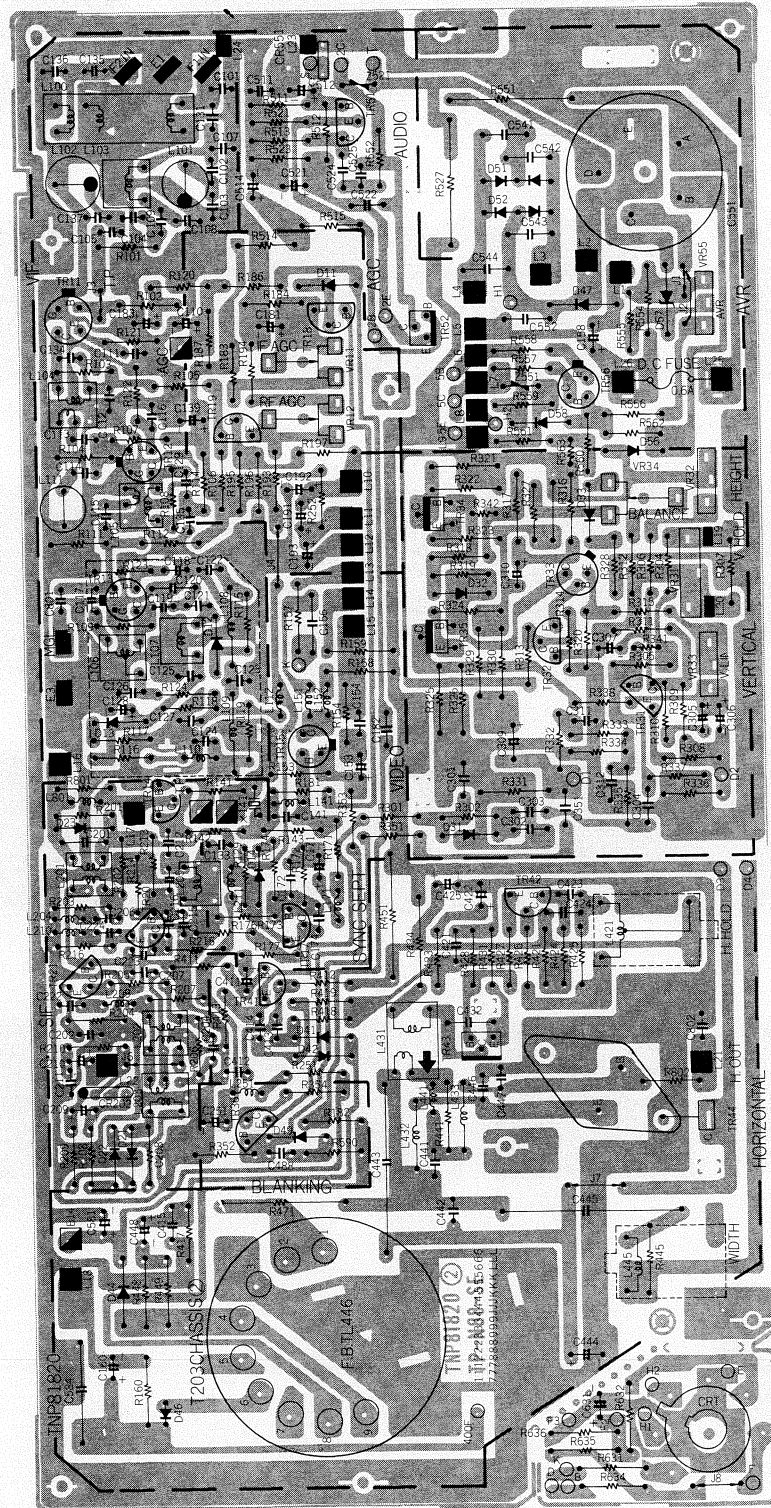


OPERATION

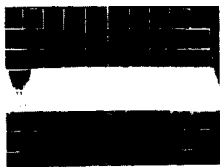
1. Sound I-F signal of 4.5 MHz is applied to A/E converter through C901.
2. The signal is applied to the Base of TR901 through T901.
3. The self-oscillation circuit is composed of TR901, T901 and C905 in which 1 MHz carrier is continuously oscillated.
4. 4.5 MHz I-F signal is converted to 5.5 MHz I-F signal in TR 901.
5. This converted 5.5 MHz I-F signal is derived from T903 and is applied to Sound I-F amp. circuit through C907.

MAIN CIRCUIT BOARD

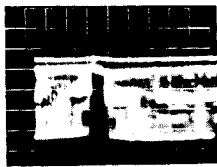
CONDUCTOR VIEW (TNP81820-81)



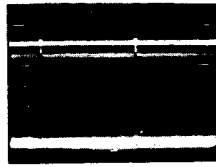
WAVEFORM PATTERNS



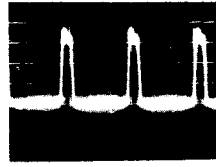
① 0.8Vp-p



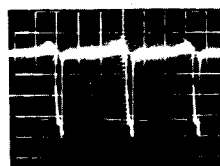
② 60Vp-p



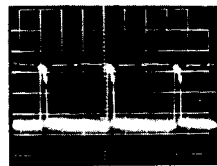
③ 11Vp-p



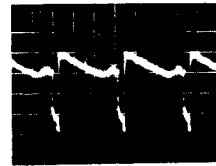
④ 18Vp-p



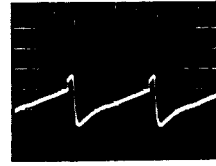
⑤ 7Vp-p



⑥ 7Vp-p



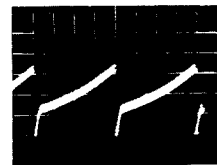
⑦ 7Vp-p



⑧ 2.6Vp-p



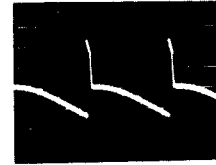
⑨ 0.8Vp-p



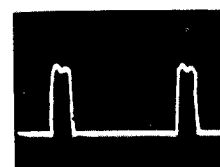
⑩ 0.7Vp-p



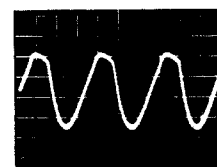
⑪ 80Vp-p



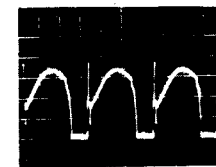
⑫ 80Vp-p



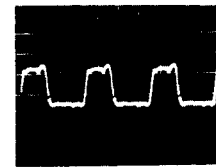
⑬ 0.96Vp-p



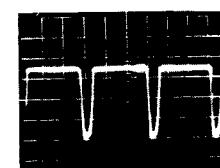
⑭ 6.4Vp-p



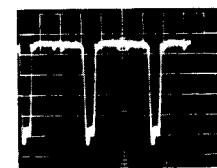
⑮ 16Vp-p



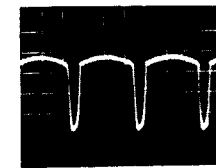
⑯ 1Vp-p



⑰ 700Vp-p



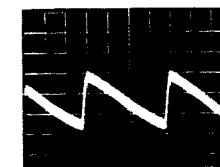
⑱ 100Vp-p



⑲ 620Vp-p



⑳ 70Vp-p



㉑ 0.6Vp-p

REPLACEMENT PARTS LIST

CABINET PARTS FOR TR-579EX

REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION	REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION
MAIN PARTS			L91	TLR809318	Balun Coil
1	TKA812101-1H	Cabinet		TJS868080	A Plug
2	TKS80312	Bottom Plate	61	TJS69751	Voltage Selector Plug
3	TKE805603-2	Escutcheon Complete	62	TJS828102S	Voltage Selector Socket
4	TKP8011585-1	Front Panel Complete	VR51	EVAQMA20CU54	Volume Control
5	TKP8052720	Aluminum Panel (Big)			
6	TKP8052730	Aluminum Panel (Small)	VR62	EVVBIAF25E52	Contrast Control
7	TKU827303-1H	Rear Cover Complete	VR63	EVVBOAF25B55	Brightness Control
8	TBM82693	Model Plate		TPC814081	Inner Carton
9	TBM80363	Panasonic Badge		TXAPD2579	Filler Complete
10	TBX80760	VHF Inner Knob		TPE84014	Set Cover
11	TBX80758	VHF Outer Knob		TQB83544	Fan Bag
12	TBX80759	UHF Inner Knob	63	TQB82544	Instruction Book
13	TBX80757	UHF Outer Knob	64	TWH810065	High Voltage Wire With Cap
14	TBX80350-1	Volume Knob	D48	TMM81544SE	Selen., CAP
15	TBX80570	Small Knob		TVM570	High Voltage Rectifier
16	TKK800358	UHF Indicator Lens	C192	ECEA16V10L	Electrolytic 10UF 16V
17	TBY80247	VHF Indicator Plate	CR91	TXNU471G20	Capristor
18	TKK800357-6	UHF Indicator Plate	CR92	TXNU471G20	Capristor
19	TKK800938	Feather Touch Plate	C193	ECKD1H473ZF	Ceramic 0.047UF +80%-20% 50V
20	TKK1523-1	Handle Cover Plate	L701	TLP80602	Filter Choke Coil
21	TKX803801	Tuner Bracket	L702	TLP80602	Filter Choke Coil
22	TKK800227-1	Handle Complete	C781	ECQU2A563MD	Polyester 0.056UF +20%-20%
23	TMM6956	Cord Hanger	R345	ERD14TJ124	Carbon 120KOhm +5%-5% 1/4W
24	TKX805001	Chassis Boss (Right)	R346	ERD14TJ104	Carbon 100KOhm +5%-5% 1/4W
25	TKX805101	Chassis Boss (Left)	R552	TRF40GM261	Non Flame 260Ohm 40W
26	TMM1553	Set Leg		TLP80602	Filter Chock Coil
27	500XB4	Picture Tube			
28	TNP81820-81	Main Circuit Board Complete	R581	TJB80305-1SE	Filter Chock Coil Mounting Board
29	TXANP2579EX	Power Circuit Board Complete	C195	ERD14TJ560	Carbon 56Ohm +5%-5% 1/4W
30	TNP81918-81	Feather Touch Circuit Board Complete	C196	ECEA16V10L	Electrolytic 10UF 16V
31	TNP81827X-2	Earphone Socket Circuit Board Complete	C197	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V
32	TNP81208-83	Sound-IF Circuit Board Complete		ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V
33	TNT96220NE	VHF Tuner	65	TMM81431	Sound-IF Circuit Board Complet Bushing
34	TNK36116E	UHF Tuner	C230	TJS818020	5-P Socket
35	TLP80221-2	Power Transformer	TR1	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V
36	TLY3456-4DS	Deflection Yoke	TR2	2SC683	R-F AMP. Transistor
37	EAS9P67SA	Speaker	TR3	2SC717	MIX. Transistor
38	EAE3YDAA	Earphone		2SC717	OSC. Transistor
39	TSAB108	Rod Antenna	SCREWS & WASHERS		
40	TSE80302S	Slide Switch	48	THE210-5	Rear Cover Mounting Screw
41	XBA1C15NS5	Fuse 1.5A	49	XTV3+8A	Voltage Selector Socket Mounting Screw
42	XBA1C08NS5	Fuse 0.8A	50	TMM407-1	Picture Tube Mounting Rubber
43	TSX141-1	Power Cord	51	XWG5G20	Picture Tube Mounting Washer
44	TNQ8904	Splitter	52	THT943	Picture Tube Mounting Screw
45	TKZ624S	Antenna Terminal	53	XWG4X16	Handle Mounting Washer
46	TJS869070	Earphone Socket	54	XWA4B	Handle Mounting Spring Washer
47	TJS69410	5-P Plug	55	XSN4+10S	Handle Mounting Screw
			56	XTB4+12A	Escutcheon Mounting Screw
			57	XTB4+12B	Set Leg Mounting Screw
			58	XTV3+10B	Tuner Mounting Screw
			59	THE329S	Voltage Selector Plug Mounting screw
			60	TJC3316	Fuse Terminal

REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION	REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION
TNP81918-81					
SWITCH					
L81	TSE80807	Relay Switch	TR14	2SC829C	Video Amp
TRANSISTORS			TR15	2SC1566	Video Output
TR81	2SC828A	Transistor	TR17	2SA564A	Sync. Sept.
TR82	2SC828A	Transistor	TR18	2SC828A	IF AGC
TR83	2SC828A	Transistor	TR19	2SA564A	RF AGC
TR84	2SC828A	Transistor	TR21	2SC1359	4.5MHz Sound-IF
TR85	2SC828A	Transistor	TR31	2SC828A	Vert. Osc.
TR86	2SC828A	Transistor	TR32	2SC828A	Vert. Amp.
TR87	2SC828A	Transistor	TR33	2SC1566	Vert. Drive
TR88	2SC1317	Transistor	TR34	2SD389BLB	Vert. Output
TR89	2SC1317	Transistor	TR35	2SB546-1	Vert. Output
DIODES			TR36	2SC828A	Blanking
D81	TVS10D1	Diode	TR41	2SC828A	Sync. Amp.
D82	TVS10D1	Diode	TR42	2SC828A	Horiz. Osc.
D83	TVS10D1	Diode	TR43	2SC1446LB	Horiz. Amp.
D84	MA150	Diode	TR44	2SD200A	Horiz. Output
CAPACITORS			TR51	2SC828A	Audio Amp.
C801	ECQM05103KZ	Polyester 0.01UF +10%—10% 50V	TR52	2SD198V	Audio Output.
C802	ECQM05154KZ	Polyester 0.15UF +10%—10% 50V	TR55	2SD198V	AVR
C803	ECQM05152KZ	Polyester 1500PF +10%—10% 50V	TR56	2SC1566	AVR
C804	ECKD1H471KB	Ceramic 470PF +10%—10% 50V	DIODES		
C805	ECKD1H471KB	Ceramic 470PF +10%—10% 50V	D11	MA150	IF AGC
C806	ECEA16V1000L	Electrolytic 1000UF 16V	D12	OA91	Video Det.
C807	ECEA16V1000L	Electrolytic 1000UF 16V	D13	MA26	AGC
C808	ECEA6V1000L	Electrolytic 1000UF 6V	D21	OA91	Sound Det.
RESISTORS			D22	OA91	Sound Det.
R801	ERC12GJ125	Solid 1.2MOhm +3%—5% ½W	D32	MA26WA	Vert. Output
R802	ERC12GJ125	Solid 1.2MOhm +5%—5% ½W	D33	MA26WA	Balance
R803	ERC12GJ565	Solid 5.6MOhm +5%—5% ½W	D41	MA150	AFC
R804	ERD14TJ153	Carbon 15KOhm +5%—5% ¼W	D42	MA150	AFC
R805	ERD14TJ272	Carbon 2.7KOhm +5%—5% ¼W	D44	TVS10D2	Rectifire
R806	ERD14TJ154	Carbon 150KOhm +5%—5% ¼W	D47	TVS10D2	Spot Killer
R807	ERD14TJ683	Carbon 68KOhm +5%—5% ¼W	D49	MA150	Blanking
R808	ERD14TJ153	Carbon 15KOhm +5%—5% ¼W	D51	TVS10DC4	Power Rectifire
R809	ERD14TJ103	Carbon 10KOhm +5%—5% ¼W	D52	TVS10DC4R	Power Rectifire
R810	ERD14TJ472	Carbon 4.7KOhm +5%—5% ¼W	D56	TVS10D1	AVR
R811	ERD14TJ471	Carbon 470Ohm +5%—5% ¼W	COILS & TRANSFORMERS		
R812	ERD14TJ273	Carbon 27KOhm +5%—5% ¼W	L101	TLI803502	Sound Trap
R813	ERD14TJ123	Carbon 12KOhm +5%—5% ¼W	L102	TLI803502	Adjacent Sound Trap
R814	ERD14TJ273	Carbon 27KOhm +5%—5% ¼W	L103	TLI801333	Video-IF Trans.
R815	ERD14TJ273	Carbon 27KOhm +5%—5% ¼W	L104	TLI801325	1st Interstage Coupling Coil
R816	ERD14TJ472	Carbon 4.7KOhm +5%—5% ¼W	L105	TIL801326	2nd Interstage Coupling Coil
R817	ERD14TJ472	Carbon 4.7KOhm +5%—5% ¼W	L106	TLI801331	3rd Interstage Coupling Coil
R818	ERD14TJ272	Carbon 2.7KOhm +5%—5% ¼W	L107	TLI801332	Video Detector Coil
R819	ERD14TJ222	Carbon 2.2KOhm +5%—5% ¼W	L108	TLM080-999	Peaking Coil 8UH
R820	ERD14TJ392	Carbon 3.9KOhm +5%—5% ¼W	L109	TLQ038-999	Peaking Coil 3.8UH
R821	ERD14TJ100	Carbon 10Ohm +5%—5% ¼W	L110	TLT251-999	Peaking Coil 250UH
R822	ERD14TJ471	Carbon 470Ohm +5%—5% ¼W	L141	TLT028-999	Peaking Coil 2.8UH
R823	ERC12GJ560	Solid 560Ohm +5%—5% ½W	L151	TLU121-123	Peaking Coil 120UH
R824	ERD14TJ1R0	Carbon 10hm +5%—5% ¼W	L152	TLT391-999	Peaking Coil 390UH
R825	ERD14TJ102	Carbon 1KOhm +5%—5% ¼W	L171	TLT151-999	Peaking Coil 150UH
R826	ERG2ANJ681	Metal Oxide 680Ohm +5%—5% 2W	L201	TLS804304	Sound-IF Input Trans.
TNP81820-81			L202	TLS802303	Discriminator Plimary
TRANSISTORS			L203	TL802304	Discriminator Secondary
TR11	2SC1686	1st Video-IF Amp	L204	TLT028-999	Peaking Coil 2.8UH
TR12	2SC1687	2nd Video-IF Amp	L211	TLT028-999	Peaking Coil 2.8UH
TR13	2SC1687	3rd Video-IF Amp	L251	TLT821-999	Peaking Coil 820UH
			L421	TLH3112-4	Horiz. Hold Trans.
			L431	TLH80407	Horiz. Drive Trans.
			L432	TLP408	Chock Coil
			L433	TLP408	Choke Coil
			L441	TLH3802C	Horiz. Line. Coil
			L445	TLH3708	Horiz. Width Coil

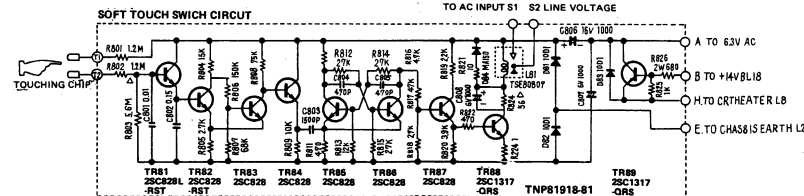
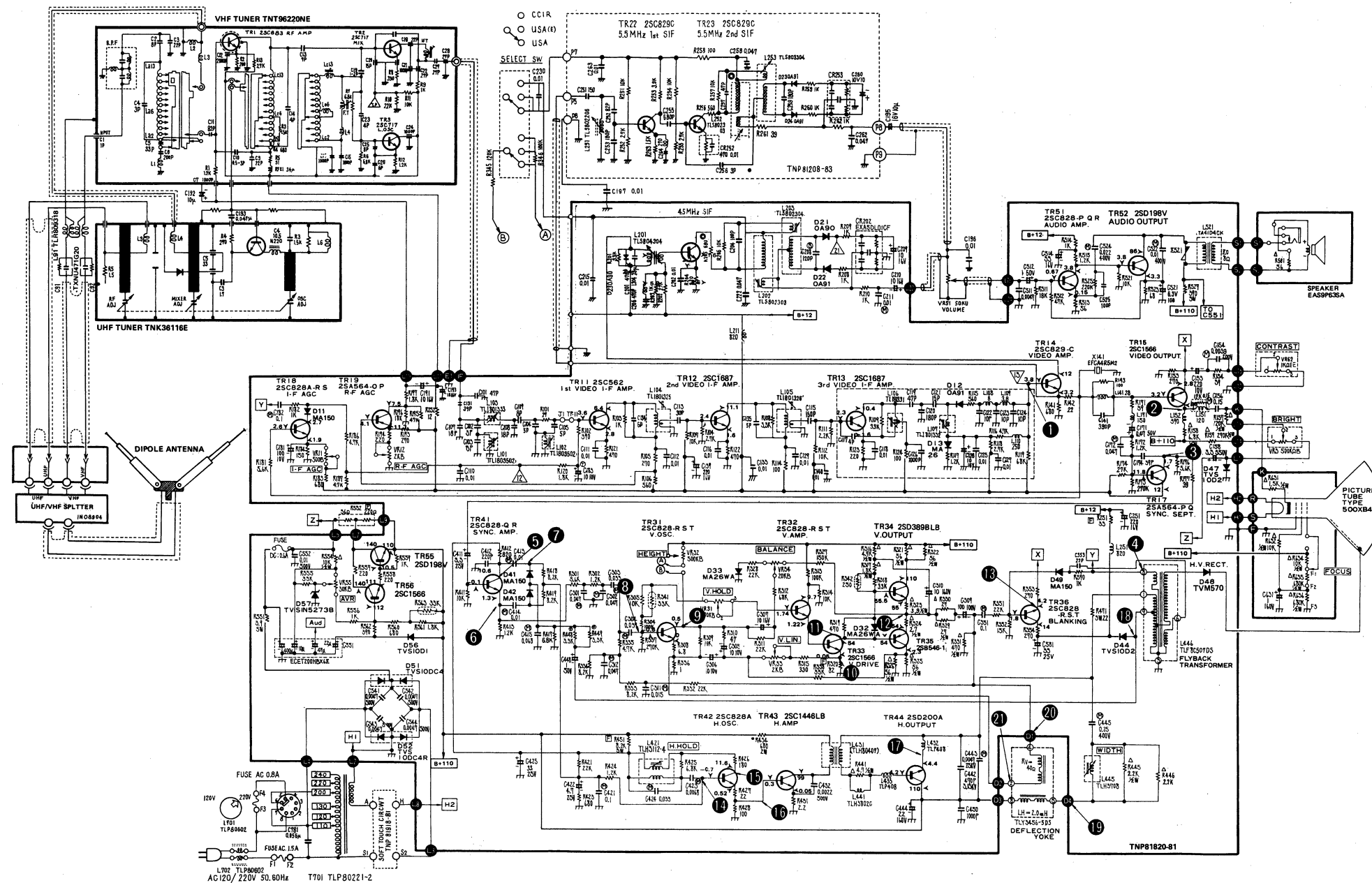
REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION	REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION
L446	TLF80507DS	Flyback Trans.	C309	ECEA100V100L	Electrolytic 100UF 100V
CAPACITORS			C310	ECEA160V10Q	Electrolytic 10UF 160V
C101	ECCD1H470J	Ceramic 47PF +5%-5% 50V	C311	ECQM05153KZ	Polyester 0.015UF +10%-10% 50V
C102	ECCD1H030CC	Ceramic 3PF +0.25PF-0.25PF 50V	C312	ECQM05473KZ	Polyester 0.047UF +10%-10% 50V
C103	ECCD1H080D	Ceramic 8PF +0.25PF-0.25PF 50V	C351	ECQM05104KZ	Polyester 0.1UF 50V
C104	ECCD1H050CT	Ceramic 5PF +0.25PF-0.25PF 50V	C353	ECCD2H220K	Ceramic 22PF +10%-10% 500V
C105	ECCD1H050CT	Ceramic 5PF +0.25PF-0.25PF 50V	C411	ECEA25V3R3L	Electrolytic 3.3UF 25V
C107	ECCD1H180K	Ceramic 18PF +10%-10% 50V	C412	ECCD1H221K	Ceramic 220PF +10%-10% 50V
C108	ECCD1H180K	Ceramic 18PF +10%-10% 50V	C413	ECQM05103KZ	Polyester 0.01UF +10%-10% 50V
C109	ECCD1H080D	Ceramic 8PF +0.5PF-0.5PF 50V	C414	ECQM05103KZ	Polyester 0.01UF +10%-10% 50V
C110	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C415	ECQM05683KZ	Polyester 0.068UF +10%-10% 50V
C111	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C421	ECQM05104KZ	Polyester 0.1UF +10%-10% 50V
C112	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C422	ECEA25V4R7L	Electrolytic 4.7UF 25V
C113	ECCD1H300J	Ceramic 30PF +5%-5% 50V	C423	ECQM05682KZ	Polyester 6800PF +10%-10% 50V
C115	ECCD1H151K	Ceramic 150PF +10%-10% 50V	C424	ECQM05333JZ	Polyester 0.033UF +5%-5% 50V
C116	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C425	ECEA25V33L	Electrolytic 33UF 25V
C117	ECCD1H040CC	Ceramic 4PF +0.25PF-0.25PF 50V	C432	ECKD2H222MB	Ceramic 2200PF +20%-20% 500V
C118	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C442	ECKD3F471KB	Ceramic 470PF +10%-10% 3KV
C119	ECCD1H470JS	Ceramic 47PF +5%-5% 50V	C443	ECOD10H472K	Polyester 4700PF +10%-10% 1KV
C120	ECCD1H181J	Ceramic 180PF +5%-5% 50V	C444	ECEA160V22Y	Electrolytic 22UF 160V
C121	ECCD1H150JS	Ceramic 15PF +5%-5% 50V	C445	ECQM4254KZ	Polyester 0.25UF +10%-10% 400V
C122	ECCD1H100D	Ceramic 10PF +0.5PF-0.5PF 50V	C448	ECEA50V1L	Electrolytic 1UF 50V
C128	ECEA16V10L	Electrolytic 10UF 16V	C450	ECKD2H102PE	Ceramic 1000PF +100%-0% 500V
C123	ECCD1H100D	Ceramic 10PF +0.5PF-0.5PF 50V	C511	ECKD1H472PF	Ceramic 4700PF +100%-0% 50V
C124	ECCD1H100D	Ceramic 10PF +0.5PF-0.5PF 50V	C512	ECEA50V1L	Electrolytic 1UF 50V
C125	ECKD1H103PF	Ceramic 0.01UF +100%-5% 50V	C514	ECEA16V33L	Electrolytic 33UF 16V
C126	ECKD1H102KB	Ceramic 1000PF +10%-10% 50V	C521	ECEA6V100V	Electrolytic 100UF 6V
C127	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C522	ECQM4103KZ	Polyester 0.01UF +10%-10% 400V
C129	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C524	ECQM2223KZ	Polyester 0.022UF +10%-10% 200V
C131	ECCD1H390K	Ceramic 39PF +10%-10% 50V	C525	ECCD2H101KB	Ceramic 100PF +10%-10% 500V
C133	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C541	ECKD2H472PE	Ceramic 4700PF +100%-0% 500V
C134	ECCD1H060DC	Ceramic 6PF +0.5PF-0.5PF 50V	C542	ECKD2H472PE	Ceramic 4700PF +100%-0% 500V
C135	ECCD1H050D	Ceramic 5PF +0.5PF-0.5PF 50V	C543	ECKD2H472PE	Ceramic 4700PF +100%-0% 500V
C139	ECEA16V220L	Electrolytic 220UF 16V	C544	ECKD2H472PE	Ceramic 4700PF +100%-0% 500V
C140	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	C551	ECET200HBX6Z	Electrolytic 200V
C141	ECKD1H391KB	Ceramic 390PF +10%-10% 50V	C552	ECKD2H103PE	Ceramic 0.01UF +100%-0% 200V
C153	ECEA10V220L	Electrolytic 220UF 10V	C581	ECEA25V33L	Electrolytic 33UF 25V
C154	ECQM05392KZ	Polyester 3900PF +10%-10% 50V	C631	ECEA160V1	Electrolytic 1UF 160V
C156	ECQM1154KZ	Polyester 0.15UF +10%-10% 125V	C-R COMBINATIONS		
C158	ECEA350V3R3	Electrolytic 3.3UF 350V	X141	EFCA4R5M2	4.5MHZ Cerap
C171	ECEA50ZR47M	Electrolytic 0.47UF 50V	CR202	EXA5DL01C	C-R Combination
C172	ECQM05473KZ	Polyester 0.047UF +10%-10% 50V	VARIABLE RESISTORS		
C174	ECCD1H390K	Ceramic 39PF +10%-10% 50V	VR11	EVTS3AA00B52	IF AGC 500OhmB
C181	ECEA10V100L	Electrolytic 100UF 10V	VR12	EVTS3AA00B23	RF AGC 2KOhmB
C182	ECQM05104KZ	Polyester 0.1UF +10%-10% 50V	VR31	EVD66A25KB25	VERT Hold 200KOhmB
C183	ECSZ10EF10N	Electrolytic 10UF 10V	VR32	EVTV0AA00B55	VERT Height 500KOhmB
C191	ECEA16V10L	Electrolytic 10UF 16V	VR33	EVTV0AA00B23	VERT Lin. 2KOhmB
C193	ECEA16V10L	Electrolytic 10UF 16V	VR34	EVTS3AA00B24	Balance 20KOhmB
C201	ECCD1H471K	Ceramic 470PF +10%-10% 50V	VR55	EVTV0AA00B34	AVR 30KOhmB
C202	ECKD1H103MD	Ceramic 0.01UF +20%-20% 50V	RESISTERS		
C204	ECCD1H101K	Ceramic 100PF +10%-10% 50V	R101	ERD14TJ270	Carbon 270Ohm +5%-5% 1/4W
C206	ECKD1H471MB	Ceramic 470PF +20%-20% 50V	R102	ERD14TJ391	Carbon 390Ohm +5%-5% 1/4W
C208	ECS1121K	Styrol 120PF +10%-10% 125V	R103	ERD14TJ102	Carbon 1KOhm +5%-5% 1/4W
C209	ECEA16V10L	Electrolytic 10UF 16V	R104	ERD14TJ272	Carbon 2.7KOhm +5%-5% 1/4W
C210	ECEA16V10L	Electrolytic 10UF 16V	R105	ERD14TJ271	Carbon 270Ohm +5%-5% 1/4W
C211	ECQM05103KZ	Polyester 0.01UF +10%-10% 50V	R106	ERD14TJ561	Carbon 560Ohm +5%-5% 1/4W
C215	ECKD1H103PF	Ceramic 0.01UF +100%-0% 50V	R107	ERD14TJ103	Carbon 10KOhm +5%-5% 1/4W
C222	ECKD1H473ZF	Ceramic 0.047UF +80%-20% 50V	R108	ERD14TJ152	Carbon 1.5KOhm +5%-5% 1/4W
C251	ECEA16V220LE	Electrolytic 220UF 16V	R109	ERD14TJ332	Carbon 3.3KOhm +5%-5% 1/4W
C301	ECQM05473KZ	Polyester 0.047UF +10%-10% 50V	R111	ERD14TJ222	Carbon 2.2KOhm +5%-5% 1/4W
C302	ECQM05473KZ	Polyester 0.047UF +10%-10% 50V	R112	ERD14TJ103	Carbon 10KOhm +5%-5% 1/4W
C303	ECQM05333KZ	Polyester 0.033UF +10%-10% 50V	R114	ERD14TJ101	Carbon 100Ohm +5%-5% 1/4W
C304	ECQM05393JZ	Polyester 0.039UF +5%-5% 50V			
C305	ECSZ10EF10N	Electrolytic 10UF 10V			
C306	ECSZ10EF10N	Electrolytic 10UF 10V			
C307	ECEA16V10LE	Electrolytic 10UF 16V			

REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION				REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION			
R115	ERD14TJ561	Carbon	560Ohm	+5%—5%	¼W	R324	ERD12FJ2R7	Carbon	2.7Ohm	+5%—5%	¼W
R116	ERD14TJ472	Carbon	4.7KOhm	+5%—5%	¼W	R325	ERD12FJ560	Carbon	560Ohm	+5%—5%	¼W
R117	ERD14TJ122	Carbon	1.2KOhm	+5%—5%	¼W	R326	ERD12FJ560	Carbon	560Ohm	+5%—5%	¼W
R118	ERD14TJ272	Carbon	2.7KOhm	+5%—5%	¼W	R327	ERD14TJ154	Carbon	150KOhm	+5%—5%	¼W
R119	ERD14TJ683	Carbon	68KOhm	+5%—5%	¼W	R328	ERD14TJ223	Carbon	22KOhm	+5%—5%	¼W
R120	ERD14TJ182	Carbon	1.8KOhm	+5%—5%	¼W	R329	ERC12GJ270	Solid	270Ohm	+5%—5%	¼W
R121	ERD14TJ471	Carbon	4700Ohm	+5%—5%	¼W	R330	ERC12GJ270	Solid	270Ohm	+5%—5%	¼W
R122	ERD14TJ471	Carbon	4700Ohm	+5%—5%	¼W	R331	ERC12GJ471	Solid	4700Ohm	+5%—5%	¼W
R123	ERD14TJ221	Carbon	2200Ohm	+5%—5%	¼W	R332	ERD14TJ223	Carbon	22KOhm	+5%—5%	¼W
R124	ERD14TJ101	Carbon	1000Ohm	+5%—5%	¼W	R333	ERD14TJ822	Carbon	8.2KOhm	+5%—5%	¼W
R141	ERD14TJ681	Carbon	6800Ohm	+5%—5%	¼W	R334	ERD14TJ822	Carbon	8.2KOhm	+5%—5%	¼W
R142	ERD14TJ220	Carbon	220Ohm	+5%—5%	¼W	R335	ERD14TJ472	Carbon	4.7KOhm	+5%—5%	¼W
R143	ERD14TJ101	Carbon	1000Ohm	+5%—5%	¼W	R336	ERD14TJ1R0	Carbon	10Ohm	+5%—5%	¼W
R153	ERD14TJ271	Carbon	2700Ohm	+5%—5%	¼W	R337	ERD14TJ274	Carbon	270KOhm	+5%—5%	¼W
R154	ERD14TJ390	Carbon	390Ohm	+5%—5%	¼W	R338	ERD14TJ333	Carbon	33KOhm	+5%—5%	¼W
R157	ERC12GJ124	Solid	120KOhm	+5%—5%	¼W	R341	ERTD2ZHL333	Termistor			
R158	ERC12GJ682	Solid	6.8KOhm	+5%—5%	¼W	R342	ERTD2ZGL251	Termistor			
R159	ERC12GJ274	Solid	270KOhm	+5%—5%	¼W	R351	ERD14TJ223	Carbon	22KOhm	+5%—5%	¼W
R171	ERD14TJ390	Carbon	390Ohm	+5%—5%	¼W	R352	ERD14TJ153	Carbon	15KOhm	+5%—5%	¼W
R172	ERD14TJ122	Carbon	1.2KOhm	+5%—5%	¼W	R353	ERD14TJ271	Carbon	2700Ohm	+5%—5%	¼W
R173	ERD14TJ274	Carbon	270KOhm	+5%—5%	¼W	R354	ERD14TJ271	Carbon	2700Ohm	+5%—5%	¼W
R174	ERD14TJ273	Carbon	27KOhm	+5%—5%	¼W	R411	ERD14TJ103	Carbon	10KOhm	+5%—5%	¼W
R176	ERD14TJ562	Carbon	5.6KOhm	+5%—5%	¼W	R412	ERD14TJ821	Carbon	820Ohm	+5%—5%	¼W
R177	ERD14TJ390	Carbon	390Ohm	+5%—5%	¼W	R413	ERD14TJ122	Carbon	1.2KOhm	+5%—5%	¼W
R181	ERD14TJ562	Carbon	5.6KOhm	+5%—5%	¼W	R417	ERD14TJ682	Carbon	6.8KOhm	+5%—5%	¼W
R182	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W	R418	ERD14TJ822	Carbon	8.2KOhm	+5%—5%	¼W
R183	ERD14TJ681	Carbon	6800Ohm	+5%—5%	¼W	R419	ERD14TJ822	Carbon	8.2KOhm	+5%—5%	¼W
R184	ERD14TJ151	Carbon	1500Ohm	+5%—5%	¼W	R421	ERD14TJ223	Carbon	22KOhm	+5%—5%	¼W
R186	ERD14TJ472	Carbon	4.7KOhm	+5%—5%	¼W	R423	ERD14TJ681	Carbon	6800Ohm	+5%—5%	¼W
R187	ERD14TJ472	Carbon	4.7KOhm	+5%—5%	¼W	R424	ERD14TJ122	Carbon	1.2KOhm	+5%—5%	¼W
R193	ERD14TJ271	Carbon	2700Ohm	+5%—5%	¼W	R425	ERD14TJ682	Carbon	6.8KOhm	+5%—5%	¼W
R194	ERD14TJ221	Carbon	2200Ohm	+5%—5%	¼W	R426	ERD14TJ181	Carbon	1800Ohm	+5%—5%	¼W
R195	ERD14TJ473	Carbon	47KOhm	+5%—5%	¼W	R427	ERD14TJ220	Carbon	220Ohm	+5%—5%	¼W
R196	ERD14TJ183	Carbon	18KOhm	+5%—5%	¼W	R428	ERD14TJ101	Carbon	1000Ohm	+5%—5%	¼W
R197	ERD14TJ182	Carbon	1.8KOhm	+5%—5%	¼W	R431	ERD14TJ2R2	Carbon	2.2Ohm	+5%—5%	¼W
R201	ERD14TJ332	Carbon	3.3KOhm	+5%—5%	¼W	R434	ERG2ANJ681	Metal Oxide	680Ohm	+5%—5%	2W
R202	ERD14TJ272	Carbon	2.7KOhm	+5%—5%	¼W	R441	ERC12GJ4R7	Solid	4.7Ohm	+5%—5%	¼W
R203	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W	R445	ERC12GJ222	Solid	2.2KOhm	+5%—5%	¼W
R204	ERD14TJ821	Carbon	8200Ohm	+5%—5%	¼W	R446	ERC12GJ222	Solid	2.2KOhm	+5%—5%	¼W
R205	ERD14TJ681	Carbon	6800Ohm	+5%—5%	¼W	R448	ERC12GJ332	Solid	3.3KOhm	+5%—5%	¼W
R206	ERD14TJ103	Carbon	10KOhm	+5%—5%	¼W	R449	ERC12GJ332	Solid	3.3KOhm	+5%—5%	¼W
R208	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W	R451	TRF3SJ822	Non Flame	8.2KOhm	+5%—5%	3W
R209	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W	R471	TRF3SJ220	Non Flame	220Ohm	+5%—5%	3W
R210	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W	R511	ERD14TJ183	Carbon	18KOhm	+5%—5%	¼W
R251	ERD14FJ330	Carbon	330Ohm	+5%—5%	¼W	R512	ERD14TJ473	Carbon	47KOhm	+5%—5%	¼W
R252	ERD14TJ120	Carbon	120Ohm	+5%—5%	¼W	R513	ERD14TJ560	Carbon	560Ohm	+5%—5%	¼W
R301	ERD14TJ562	Carbon	5.6KOhm	+5%—5%	¼W	R514	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W
R302	ERD14TJ122	Carbon	1.2KOhm	+5%—5%	¼W	R515	ERD14TJ122	Carbon	1.2KOhm	+5%—5%	¼W
R304	ERD14TJ104	Carbon	100KOhm	+5%—5%	¼W	R521	ERD14TJ103	Carbon	10KOhm	+5%—5%	¼W
R305	ERD14TJ103	Carbon	10KOhm	+5%—5%	¼W	R523	ERD14TJ680	Carbon	680Ohm	+5%—5%	¼W
R308	ERD14TJ6R8	Carbon	6.8Ohm	+5%—5%	¼W	R525	ERD14TJ224	Carbon	220KOhm	+5%—5%	¼W
R309	ERD14TJ103	Carbon	10KOhm	+5%—5%	¼W	R527	TRF3SJ391	Non Flame	3900Ohm	+5%—5%	3W
R310	ERD14TJ470	Carbon	470Ohm	+5%—5%	¼W	R551	TRF5SK3R9	Non Flame	3.90Ohm	+5%—5%	5W
R311	ERD14TJ223	Carbon	22KOhm	+5%—5%	¼W	R554	ERC12GJ103	Solid	10KOhm	+5%—5%	¼W
R312	ERD14TJ683	Carbon	68KOhm	+5%—5%	¼W	R555	ERD14TJ333	Carbon	33KOhm	+5%—5%	¼W
R313	ERD14TJ104	Carbon	100KOhm	+5%—5%	¼W	R556	ERD14FJ102	Carbon	1KOhm	+5%—5%	¼W
R314	ERD14TJ103	Carbon	10KOhm	+5%—5%	¼W	R557	ERD14FJ221	Carbon	2200Ohm	+5%—5%	¼W
R315	ERD14TJ331	Carbon	3300Ohm	+5%—5%	¼W	R558	ERD14FJ221	Carbon	2200Ohm	+5%—5%	¼W
R316	ERC12GJ472	Solid	4.7KOhm	+5%—5%	¼W	R559	ERD14FJ102	Carbon	1KOhm	+5%—5%	¼W
R317	ERC12GJ182	Solid	1.8KOhm	+5%—5%	¼W	R560	ERD14FJ681	Carbon	6800Ohm	+5%—5%	¼W
R318	ERD14TJ332	Carbon	3.3KOhm	+5%—5%	¼W	R561	ERD14FJ182	Carbon	1.8KOhm	+5%—5%	¼W
R319	ERD14TJ471	Carbon	4700Ohm	+5%—5%	¼W	R562	ERD14FJ391	Carbon	3900Ohm	+5%—5%	¼W
R320	ERD14FJ820	Carbon	820Ohm	+5%—5%	¼W	R563	ERTD2ZHL332S	Thermistor			
R321	ERD12FJ560	Carbon	560Ohm	+5%—5%	¼W	R590	ERD14TJ102	Carbon	1KOhm	+5%—5%	¼W
R322	ERD12FJ560	Carbon	560Ohm	+5%—5%	¼W	R631	ERC12GJ152	Solid	1.5KOhm	+5%—5%	¼W
R323	ERD12FJ3R9	Carbon	3.90Ohm	+5%—5%	¼W	R632	ERC12GJ103	Solid	10KOhm	+5%—5%	¼W

REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION	REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION
R634	ERC12GJ103	Solid 10KOhm +5%—5% ¼W	C253	ECCD1H181J	Ceramic 180PF +5%—5% 50V
R635	ERC12GJ684	Solid 680KOhm +5%—5% ¼W	C255	ECKD1H681KB	Ceramic 680PF +10%—10% 50V
R636	ERC12GJ684	Solid 680KOhm +5%—5% ¼W	C256	ECCD1H030CC	Ceramic 3PF +0.25PF—0.25PF 50V
Z521	ERVIF2820M	Varistor 1W	C257	ECCD1H470K	Ceramic 47PF +10%—10% 50V
OTHERS			C258	ECKD1H473ZF	Ceramic 0.047PF +80%—20% 50V
L521	TJC3316	Fuse Holder	C259	ECQS1181K	Styrol 180PF +10%—10% 125V
	TJS25650	Picture Tube Socket	C260	ECEA10V10L	Electrolytic 10UF 10V
	TTA41D4CK	Audio Output Trans.	C262	ECQM05473KZ	Polyester 0.047UF +10%—10% 50V
	XBAT21601-G	Fuse 0.6A	C263	ECKD1H103PF	Ceramic 0.01UF +100%—0% 50V
TNP81208-83			C264	ECCD1H271K	Ceramic 270PF +10%—10% 50V
TRANSISTORS			RESISTORS		
TR22	2SC829C	1st Sound-I-F	R251	ERD14TJ103	Carbon 10KOhm +5%—5% ¼W
TR23	2SC829C	2nd Sound-I-F	R252	ERD14TJ272	Carbon 2.7KOhm +5%—5% ¼W
DIODES			R253	ERD14TJ392	Carbon 3.9KOhm +5%—5% ¼W
D23	0A91	Sound Det.	R254	ERD14TJ103	Carbon 10KOhm +5%—5% ¼W
D24	0A91	Sound Det.	R255	ERD14TJ272	Carbon 2.7KOhm +5%—5% ¼W
COILS & TRANSFORMERS			R256	ERD14TJ561	Carbon 560Ohm +5%—5% ¼W
L251	TLS802206	Sound-I-F Input Trans	R257	ERD14TJ103	Carbon 10KOhm +5%—5% ¼W
L252	TLS802303	Discriminatur Primary	R258	ERD14TJ101	Carbon 1000Ohm +5%—5% ¼W
L253	TLS803304	Discriminator Secondary	R259	ERD14TJ102	Carbon 1KOhm +5%—5% ¼W
L254	TLT028-999	Peaking Coil 2.8UH	R260	ERD14TJ102	Carbon 1KOhm +5%—5% ¼W
CAPACITORS			R261	ERD14TJ390	Carbon 390Ohm +5%—5% ¼W
C251	ECCD1H151K	Ceramic 150PF +10%—10% 50V	R262	ERD14TJ102	Carbon 1KOhm +5%—5% ¼W
C252	ECCD1H820K	Ceramic 82PF +10%—10% 50V	R263	ERD14TJ152	Carbon 1.5KOhm +5%—5% ¼W
			C-R COMBINATIONS		
			CR252	EXAP103Z471	C-R Combination
			CR253	EXA5DL01C	C-R Combination

SCHEMATIC DIAGRAM FOR MODEL TR-579EX

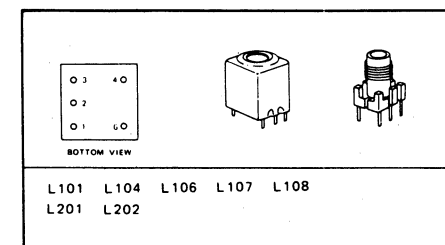
CHASSIS No. T203V-A



TRANSISTOR BASE INFORMATION

COLLECTOR BASE EMITTER	GROUND EMITTER COLLECTOR BASE	BASE COLLECTOR EMITTER	EMITTER COLLECTOR BASE	COLLECTOR BASE EMITTER	COLLECTOR BASE EMITTER	COLLECTOR BASE EMITTER	COLLECTOR BASE EMITTER
2SC717	2SC683	TVSSJE5472	2SD200A	2SA564A 2SC828A	2SC829C	2SC1566	2SC1686 2SC1687
2SC828L 2SC828	2SC828	2SC828	2SC828	2SC828	2SC828	2SC828	2SD389B

TRANSFORMER TERMINAL INFORMATION



NOTE

- RESISTOR**
All resistors are carbon 1/4W resistor, unless otherwise noted the following marks.
Unit of resistance is OHM (Ω). (K=1,000, M=1,000,000)
△ : Solid resistor
□ : Wire wound resistor
— : Fuse resistor
• : Metal oxide resistor
⊞ : Thermistor
- CAPACITOR**
All capacitors are ceramic 50V capacitor, unless otherwise noted the following marks.
Unit of capacitance is µF, unless otherwise noted.
Ⓜ : Polyester capacitor
Ⓢ : Polystyrene capacitor
— : Electrolytic capacitor
- COIL**
Unit of inductance is µH.
- TEST POINT**
▽ : Test point position.
- VOLTAGE MEASUREMENT**
Voltage is measured by a volt ohm meter with DC 20K OHM/V receiving normal signal, when all controls are set to the maximum position.
- Number in red circle indicates waveform number.
- When arrow mark (↗) is found, connection is easily found along with the direction of an arrow.
- When schematic diagram of a board is described in more than two places, they are encircled with dotted line (---).
- This schematic diagram is the latest at the time of printing and subject to change without notice.
(Nov, '75)

EXPLODED VIEW

